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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,571	12/05/2006	Philippe Espiard	290716US0PCT	9056
22850 7590 03/18/2011 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER THOMPSON, CAMIE S				
ART UNIT		PAPER NUMBER		
1786				
NOTIFICATION DATE		DELIVERY MODE		
03/18/2011		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/578,571

Applicant(s)

ESPIARD ET AL

Examiner

Camie S. Thompson

Art Unit

1786

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed 3/8/2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 4-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2 and 4-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-942)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 8, 2011 has been entered.
2. Applicant's amendment and accompanying remarks filed March 8, 2011 are acknowledged.
3. Examiner acknowledges amended claim 1.
4. Examiner acknowledges cancelled claim 3.
5. Examiner acknowledges newly added claims 23-26.
6. The rejection of claims 1-2, 4-9 and 18-20 under 35 U.S.C. 102(b) as being anticipated by Pfeil et al., U.S. Patent Number 5,908,902 is overcome by applicant's amendment.
7. The rejection of claims 10-17 under 35 U.S.C. 103(a) as being unpatentable over Caccini et al., U.S. Patent Number 5,968,645 in view of Pfeil et al., U.S. Patent Number 5,908,902 is overcome by applicant's amendment.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

9. Claims 1-2, 4-14, 16, 18-24 are rejected under 35 U.S.C. 102(a) as being anticipated by Espiard et al., WO 2004/007395 with U.S. Patent Number 7,887,908 used as the English equivalent.

Espiard discloses a thermal and/or acoustic insulation product based on mineral wool fibers, which comprises at least 1% by weight of binder obtained from a sizing composition, which consists of at least one water dispersible or water emulsifiable epoxy-type resin that can be of the glycidyl ether type; a non-volatile amine hardener; a silane coupling agent; and an imidazole as per instant claim 1 (see reference claim 1; abstract; column 3, lines 31-33; column 3, line 66-column 4, line 8; column 4, lines 39-55; and reference claim 12) The Espiard reference also discloses in column 5, lines 3-4 that the imidazole can be 2-methylimidazole as per instant claims 2 and 24. The reference discloses that the epoxy resin has an EEW value that is between 150 and 2000 as per instant claims 4 and 18 (see reference claim 1 and abstract). Espiard discloses in column 4 that the amine hardener can be an aliphatic or aromatic polyamine or dicyandiamine with an amine/H equivalent weight of 20-30 as per instant claims 6, 8 and 19. It is disclosed in column 3, line 66-column 4, line 8 of the reference that the sizing composition comprises 0.1 to 2 parts of silane and/or 0 to 15 parts of mineral oil calculated in parts by weight per 100 parts of dry resin as per instant claims 7, 9, 23 and 26. Reference claim 7 discloses a

process for the manufacturing of a thermal and/or acoustic insulation product comprising a sizing composition comprising at least 1% by weight of binder as defined in claims 10-14 and 16. The Espiard reference discloses the same insulation product as the present claims and it would be expected that the water dilutability of the Espiard reference would be the same as defined in present claim 5.

Regarding the limitation that the "epoxy resin is prepared by the reaction of epichlorohydrin with an alcohol...", this is a process limitation. Process limitations in a product claim are not given any patentable weight. Even though product-by-process claims are limited and defined by the process, determination of patentability is based on the product itself. The manner in which the epoxy resin is manufactured does not make it a different epoxy resin from the epoxy resin of the Espiard reference.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Espiard et al., WO 2004007395 with U.S. Patent Number 7,887,908 used as the English equivalent in view of Caccini et al., U.S. Patent Number 5,968,645.

Espiard discloses a thermal and/or acoustic insulation product based on mineral wool fibers, which comprises at least 1% by weight of binder obtained from a sizing composition, which

consists of at least one epoxy-type resin whose EEW value is between 150 and 2000. Espiard also discloses that the resin used is a water dispersible or water emulsifiable epoxy resin. The Espiard reference discloses that the sizing composition also comprises a non-volatile amine hardener and a mixture of an imidazole.

Espiard does not disclose a veil of mineral wool fibers and the grammage of the mineral wool fibers as defined in present claim 15. Caccini discloses a sizing composition sprayed onto fibers wherein the fibers are comprised of a veil of glass fibers (mineral wool) (see column 6, lines 6-54). The Caccini reference also discloses that the fibers are collected in sheet form as required by present claim 10 (see column 5, lines 50-51 and column 6, lines 51-54). Caccini also discloses that the fibrous materials can be used for thermal and/or acoustic insulation (see column 6, lines 24-28). Caccini discloses that the sheet is passed through an enclosure and heated from 100 to 300 degree C. The Caccini reference discloses that an epoxy resin of the glycidyl ether type used in combination with an amine hardener can be used in the sizing composition.

Neither Espiard nor Caccini discloses the grammage of the veil. However, this is an optimizable feature. The weight of the glass fiber veil affects the dimensional stability and strength. Therefore, it would have been obvious to one of ordinary skill in the art for the mineral wool fibers of the Espiard reference to be a veil of mineral fibers with a weight of 10 to 300 g/m² in order to have an acoustical product that has high dimensional stability and increased mechanical strength.

12. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Espiard et al., WO 2004007395 with U.S. Patent Number 7,887,908 used as the English equivalent in view of Pfeil et al., U.S. Patent Number 5,908,902.

Espiard discloses a thermal and/or acoustic insulation product based on mineral wool fibers, which comprises at least 1% by weight of binder obtained from a sizing composition, which consists of at least one epoxy-type resin whose EEW value is between 150 and 2000. Espiard also discloses that the resin used is a water dispersible or water emulsifiable epoxy resin. The Espiard reference discloses that the sizing composition also comprises a non-volatile amine hardener and a mixture of an imidazole.

Espiard does not disclose a bisphenol epoxy resin. Pfeil discloses a self-emulsifying epoxy resin that is useful in dispersions (see column 1, lines 5-11). Pfeil also discloses aqueous epoxy resin dispersion (see column 4, lines 15-20). The reference discloses that epoxy resin dispersion comprises epoxide compounds preferably polyglycidyl ethers (see column 4, lines 35-36). Pfeil also discloses that the dispersion can be used in compositions for mineral substrates and glass. Pfeil discloses the use of bisphenol A (see column 6, lines 25-62). Bisphenol A epoxy resins cure at room temperature. Therefore, it would have been obvious to one of ordinary skill in the art to use bisphenol A in the Espiard reference in order to have a stable water emulsified epoxy resin due to it being able to cure at room temperature.

Response to Arguments

13. Applicant's arguments with respect to the present claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Camie S. Thompson whose telephone number is 571-272-1530. The examiner can normally be reached on Monday-Friday 8:00 am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 1786

/Camie S Thompson/
Examiner, Art Unit 1786